

Transportation Safety Board
of Canada



Bureau de la sécurité des transports
du Canada

Place du Centre
200 Promenade du Portage
4th Floor
Gatineau, Quebec
K1A 1K8

Tel. (819) 953-1398
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M13N0108

AUG 28 2013

[Redacted]
Chair, Marine Atlantic

Dear [Redacted]

RE: Marine Safety Advisory Letter No. 03/13 – Marine Atlantic Vessel Speeds

On 31 July 2013, the passenger vessel *Blue Puttees* departed Port aux Basques Harbour, Newfoundland and Labrador, with 398 passengers and 91 crew on board and ran aground a minute and a half later. The vessel, which had been bound for Sydney, Nova Scotia, sustained damage to the hull in way of the bulbous bow, and ballast tank No. 1 was holed. There were no injuries or pollution. The vessel was refloated during the next high tide and returned to the ferry dock for further assessment. The TSB investigation is ongoing (TSB Occurrence No. M13N0108).

Information obtained by the TSB indicates that:

- when the *Blue Puttees* was departing its berth, the master ordered 10° port rudder and applied 50% ahead propeller pitch;
- the quartermaster incorrectly applied 10° starboard rudder;
- after approximately 42 seconds, the master observed that the vessel heading line on the centre starboard radar was altering to starboard and realized that the rudder order had been applied the wrong way; and,
- the master applied full astern pitch, but the vessel's speed had already reached 9.6 knots, and the vessel grounded before it could be stopped.

Analysis of relevant data shows that, as Marine Atlantic ferries are departing the Port aux Basques ferry dock, they are routinely proceeding at speeds of more than 10 knots within the confine of the harbour. These departure speeds may not allow sufficient time for bridge teams to react in preventing an accident in the event of errors or system failures.

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The TSB has learned that Marine Atlantic has no policy concerning the maximum speed allowed by their fleet of ferries. Such policy becomes particularly relevant when vessels navigate in restricted waters, such as the harbours at Port-aux-Basques or Sydney, where a maximum of reaction time following errors and/or system failures is critical for the safety of the vessel.

As a result, Marine Atlantic may wish to review its policy concerning the vessel speeds being practiced by their fleet throughout their voyages to ensure that their vessels navigate at a safe speed at all time. The TSB would appreciate being advised of any such action. Moreover, an investigator may follow-up with you at a later date.

Yours sincerely,



Marc-André Poisson
Director of Investigations – Marine

c.c. Transport Canada, Marine Safety and Security

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BACKGROUND INFORMATION

TSB Occurrence No. M13N0108

TSB Contacts

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Transportation Safety Board of Canada – Atlantic Region
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c.c.:

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TYPES OF TSB SAFETY COMMUNICATIONS

GENERAL

The purpose of a safety communication is to ensure that identified risks are communicated to those persons or organizations best able to effect change to convince them to take remedial action.

OCCURRENCE BULLETINS

An occurrence bulletin is a formal, written, safety communication used to inform regulatory or industry stakeholders of potential operational or technical concerns that were uncovered by the TSB's initial examination of the circumstances surrounding an occurrence. Bulletins contain only factual information.

SAFETY INFORMATION LETTERS

Safety information letters are generally concerned with safety deficiencies posing relatively low risks, and are used to inform regulatory or industry stakeholders of unsafe conditions that do not require immediate remedial action. Safety information letters are used to pass information for the purposes of safety promotion or to support or clarify issues that are being examined by a stakeholder.

SAFETY ADVISORY LETTERS

Safety advisory letters are concerned with safety deficiencies that pose low to medium risks, and used to inform regulatory or industry stakeholders of unsafe conditions. A safety advisory letter suggests remedial action to reduce risks to safety.

SAFETY CONCERNS

Safety concerns focus on an identified unsafe condition for which there is insufficient evidence to validate a systemic safety deficiency. However, the risks posed by this unsafe condition warrant highlighting. A safety concern provides a marker to the industry and the regulator that the Board has insufficient information to warrant further recommendations at this time; however, as more data and analysis become available, the Board will return to this unsafe condition if it is not readily redressed.

SAFETY RECOMMENDATIONS

The *Canadian Transportation Accident Investigation and Safety Board Act (CTAISB Act)* makes specific provision for the Board to make recommendations to correct identified safety deficiencies. Recommendations are used to address those systemic safety deficiencies posing the highest risks to the transportation system and, therefore, warranting the highest levels of regulatory and corporate attention.

RESPONSES TO TSB SAFETY COMMUNICATIONS

The *CTAISB Act* requires that federal ministers provide formal responses as to actions taken or planned in response to TSB recommendations. The Act does not mandate responses by other stakeholders to whom Board recommendations are issued. Notwithstanding, these stakeholders are requested to provide a response, and normally do so.

Although responses to other forms of safety communications are not requested or expected, the TSB often receives responses to safety advisory and safety information letters, and the substance of these responses are reflected in the Board's investigation report.

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M13N0108

AUG 28 2013

[Redacted]
Chair, Marine Atlantic
[Redacted]

Dear [Redacted]

RE: **Marine Safety Advisory Letter No. 04/13 - On-board Implementation of Bridge Resource Management**

On 31 July 2013, the passenger vessel *Blue Puttees* departed Port aux Basques harbour, Newfoundland and Labrador, with 398 passengers and 91 crew on board and ran aground a minute and a half later. The vessel, which had been bound for Sydney, Nova Scotia, sustained damage to the hull in way of the bulbous bow, and ballast tank No. 1 was holed. There were no injuries or pollution. The vessel was refloated during the next high tide and was returned to the ferry dock for further assessment.

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- the master applied full astern pitch, but the vessel's speed had already reached 9.6 knots, and the vessel grounded before it could be stopped.

In addition to performing their regular duties, bridge team members have a responsibility to maintain overall situational awareness and exchange information with one another. This is especially important during higher risk operations, such as when navigating the restricted waters in the Port aux Basques harbour.

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The TSB has learned that Marine Atlantic bridge teams are proactively trained in bridge resource management (BRM). In this occurrence, however, there was no monitoring of the quartermaster's actions between the time the steering error was made and the time it was detected by the master.

As a result, Marine Atlantic may wish to review on-board BRM training and procedures for their bridge teams to ensure vessels are navigated safely between berths. The TSB would appreciate being advised of any such action. Moreover, an investigator may follow up with you at a later date.

As the identified safety issues associated with this occurrence have been brought to your attention and consideration (MSA 03/13 and present MSA 04/14), it is not anticipated that an investigation report will be issued.

Yours sincerely,



Marc-André Poisson
Director of Investigations – Marine

cc. Transport Canada, Marine Safety and Security

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